

Claims

1. A control channel having a frame comprising:
 - a Reverse Transmitter Sector Indicator Subchannel (R-TSICH), wherein
5 the R-TSICH is utilized by a mobile station to communicate a PN_OFFSET;
 - a Reverse Quality Indicator subchannel (R-Quality), wherein R-Quality
used to deliver of forward channel quality feedback;
 - a Reverse Echo subchannel (R-Echo), wherein R-Echo is utilized to
deliver forward link configuration information to assist in a fast cell site selection
10 (FCSS) process; and
 - a Reverse Acknowledgement Indicator Sub-channel (R-AISCH), wherein
the R-AISCH is utilized for the indication of successful reception from the mobile
station.
- 15 2. The control channel of claim 1 wherein the R-AISCH is one-bit
acknowledgement feedback.

3. A method for transmitting a control channel, the method comprising the steps of:

- generating CRC bits for a Reverse Transmitter Sector Indicator Subchannel (R-TSICH), a Reverse Quality Indicator subchannel (R-Quality), and
5 a Reverse Echo subchannel (R-Echo) to produce a Reverse Control Subchannel, wherein the R-TSICH is utilized by a mobile station to communicate a PN_OFFSET, R-Quality used to deliver of forward channel quality feedback, and R-Echo is utilized to deliver forward link configuration information to assist in a fast cell site selection (FCSS) process; and
10 multiplexing a Reverse Acknowledgement Indicator Sub-channel (R-AISCH) onto the Reverse Control Subchannel, wherein the R-AISCH is utilized for the indication of successful reception from the mobile station.
4. The method of claim 3 wherein the step of multiplexing the R-AISCH onto the
15 Reverse Control Subchannel comprises the step of multiplexing a one-bit acknowledgement feedback onto the Reverse Control Subchannel.

5. A control channel having a frame comprising:
- a Reverse Transmitter Sector Indicator Subchannel (R-TSICH) existing in a 3.75 ms portion of the frame, wherein the R-TSICH is utilized by a mobile station to communicate a PN_OFFSET;
 - 5 a Reverse Quality Indicator subchannel (R-Quality) existing in the 3.75 ms portion of the frame, wherein R-Quality used to deliver of forward channel quality feedback;
 - a Reverse Echo subchannel (R-Echo) existing in the 3.75 ms portion of the frame, wherein R-Echo is utilized to deliver forward link configuration information to assist in a fast cell site selection (FCSS) process; and
 - 10 a Reverse Acknowledgement Indicator Sub-channel (R-AISCH) existing in a 1.25 ms portion of the frame, wherein the R-AISCH is utilized for the indication of successful reception from the mobile station.
- 15 6. The control channel of claim 5 wherein the R-AISCH is one-bit acknowledgement feedback.